

Amend claim 1 as shown below:

5/16/71  
1. (Twice Amended) A method of generating a [synthetic] cyclical sound waveform [output] corresponding to a sequence of substantially similar cycles, said method comprising [the steps of]:

- CI
- (a) generating a [synthetic] cyclical sound waveform sample;
  - (b) generating a successive cyclical sound waveform sample from said [synthetic] cyclical sound waveform sample and data defining a transformation followed by said cycles in a temporal vicinity of said [synthetic] cyclical sound waveform sample;
  - (c) designating said successive cyclical sound waveform sample as a [synthetic] cyclic sound waveform sample and repeating [step] (b);
  - (d) repeating [step] (c) a plurality of times to generate a sequence of said successive cyclical sound waveform samples corresponding to a plurality of said cycles; and
  - (e) outputting the samples of said sequence to generate a waveform representing a cyclical sound.

Please add new claim 16:

--16. A method of generating a synthetic voiced speech waveform, said method comprising:

- CI
- (a) storing data defining n-dimensional state space representations of voiced speech signals, n being an integer having a value of at least three, in which successive voiced speech pitch pulse cycles are superimposed to provide a model of voiced speech dynamics;

(b) selecting a synthesized waveform starting point in said n-dimensional state space representation for a predetermined voiced speech waveform that is offset from said stored data by an offset vector;

(c) selecting successive further synthesized waveform points in said n-dimensional state space representation for said predetermined voiced speech waveform that are also respectively offset from said stored data in dependence jointly upon the preceding point in the synthesized sequence, nearest other stored points in state sequence space and an offset vector therefrom;

(d) repeating (b) and (c) for plural voiced speech pitch cycles; and

(e) outputting the resulting sequence of thus synthesized waveform points to generate a voiced speech waveform.--

---